

Notice of Allowability	Application No.	Applicant(s)	
	09/635,660	MINE, TADAMI	
	Examiner	Art Unit	
	Heather R. Long	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the species election filed on 12/16/2004.
2. ☒ The allowed claim(s) is/are 1-12.
3. ☒ The drawings filed on 10 August 2000 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>8/10/2000</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Election/Restrictions

1. Applicant's election of claims 5-8 (Species 2) in the reply filed on December 16, 2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

However, upon conducting the search for claims 5-8 the Examiner found it not to be a burden to conduct a search on all the pending claims. Therefore, all claims were examined and found to be allowable. The Office apologizes for any inconvenience caused to the Applicant.

Allowable Subject Matter

2. Claims 1-12 are allowed.

3. The following is a statement of reasons for the indication of allowable subject matter: prior art fails to teach or fairly suggest a noise reduction circuit, in combination with all the other elements claimed, comprising:

a. A first mixer selecting a lower level signal between the output signal of the CCD and a first pulse signal generated by the pulse generator; a second mixer selecting a lower level signal between the output signal of the CCD and a second pulse signal generated by the pulse generator; and a delay circuit delaying an output signal of the second mixer (claim 1).

- b. A first mixer selecting a lower level signal between the output signal of the CCD and a pulse signal generated by the pulse generator; and a second mixer which selects a lower level signal between an output signal of the delay circuit and a pulse signal generated by the pulse generator (claim 5).
- c. A first mixer selecting a lower level signal between the output signal of the CCD and a pulse signal generated by the pulse generator; and a second mixer selecting a lower level signal between an output signal of the delay circuit and a pulse signal generated by the pulse generator (claim 9).

Conclusion

- 4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - a. Inamori (U.S. Patent 5,715,000) discloses a noise reduction circuit comprising a delay means which delays the output video signal by one picture unit, and a difference generating means which derives the difference between the input video signal and the delayed video signal output from the aforementioned delay means. However, Inamori lacks the first and second mixers along with the pulse generator as claimed above.
 - b. Nakamura (JP 04-159880) discloses a noise reduction circuit comprising a delay difference circuit which finds the difference between an input image pickup signal and a delayed image pickup signal obtained by delaying the input image pickup signal and a mixer circuit which outputs the difference signal of the delay

difference circuit and the high-level signal component of a separately inputted prescribed reference pulse. However, Nakamura lacks the first and second mixers as claimed above.

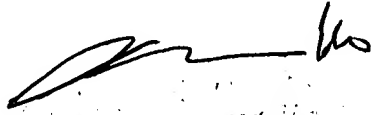
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather R. Long whose telephone number is 571-272-7368. The examiner can normally be reached on Mon. - Thurs.: 7:00 am - 4:30 pm, and every other Fri.: 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on 571-272-7950. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Heather R Long
Examiner
Art Unit 2615

HRL
April 28, 2005



TUAN HO
PRIMARY EXAMINER